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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/821,411	03/29/2001	Haruo Sunakawa	14463	3677

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EXAMINER

MULPURI, SAVITRI

ART UNIT	PAPER NUMBER
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2812

DATE MAILED: 05/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action**Application No.  
**09/821,411**Applicant(s)  
**Sunukawa et al**Examiner  
**Savitri Mulpuri**Art Unit  
**2812**

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED/28/03 IDS,3/26/03 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

Therefore, further action by the applicant is required to avoid the abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

THE PERIOD FOR REPLY [check only a) or b)]

- a) ☒ The period for reply expires 4 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ they raise the issue of new matter (see NOTE below);
- (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_

3. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_

4. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
Arguments are not convincing

6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.

7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☒ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: none

Claim(s) objected to: none

Claim(s) rejected: 10-20

Claim(s) withdrawn from consideration: \_\_\_\_\_

8. ☐ The proposed drawing correction filed on \_\_\_\_\_ is a) ☐ approved or b) ☐ disapproved by the Examiner.

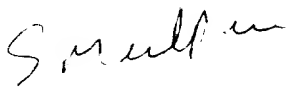
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_

10. ☒ Other: see the attachment

*S. Mulpuri*  
**SAVITRI MULPURI**  
**PRIMARY EXAMINER**

Attachment to the Advisory Action: This action is in response to the applicant submission of IDS and remarks on the previous office final action received on 1/28/03 and 3/26/03 successively. Applicant arguments based on applicant reliance on non-applied disclosure of the prior art in the rejection. Claims were rejected over the laser embodiment in fig. 4 and related description. Rejection includes forming metal electrode "60" as protective layer on nitride compound semiconductor layers "52-59" for laser device. Applicant claims are not limited to "forming metal layer as protective layer covering the surface of nitride compound layer and using protective layer as electrode" and "removing the substrate" for producing FET or laser. But nowhere in the claims there is no recitation of connection between protective layer and removal of the substrate. Kawai teaches metal "60" and interpreted as protective layer and Kawai initially form metal on the entire surface of nitride compound layer "59" before forming patterning and etching to form ohmic contact stripes "60". Since claims have open language "comprising, claim can include further processing of patterning and etching.

Kawai discloses after forming metal layer "60", removing the substrate of sapphire to expose buffer GaN layer "52 or 53" in mixture of phosphoric /sulphuric acid mixture as high as 450 C (see col.8, lines 37-41). . Claims are recited such that claims can be interpreted to removal of the substrate not in its entirety. Even if claims are interpreted as removal of the substrate in it entirety, secondary reference by Motoki et al clearly teach the art recognized equivalents of either partially or fully removal of the substrate for making laser device for reducing the light absorption. Motoki further mention sapphire has less light absorption compared GaAs. (see fig 1 A and fig. 5). Applicant argues that Motoki does not teach using protective layer and such limitation is taught in primary reference before removing the substrate. However, Motoki is simply relied on the art recognized equivalence of removal of the substrate either fully or partially for making laser device.

  
SAVITRI MULPURI  
PRIMARY EXAMINER